

Organizational Learning: The Means of Organizational Excellence

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Abstract

Purpose: This paper attempts to highlight the significant role of Organizational Learning (OL) in improving Organizational Excellence (OE). OL is widely acknowledged as a critical factor for OE at the Telecommunications sector in Egypt.

Research Design/Methodology: To assess positive OL (OL questionnaire American Society for Training and Development, 2002) and OE (OE survey Kandula, 2002; Hesseblin & Gohanston, 2002) are used. The data of the study was collected from 315 employees at the Telecommunications sector in Egypt. Out of the 290 questionnaires that were distributed to employees at the Telecommunications sector in Egypt, 260 usable questionnaires were returned, a response rate of 89%. Multiple Regression Analysis (MRA) was used to confirm the research hypotheses.

Findings: There is a statistically significant relationship between the dimensions of OL (the dynamics of learning, conversion of the organization, employee empowerment, knowledge management, and the application of technology) and OE at the Telecommunications sector in Egypt.

Practical implications: This research contributes to the need for organizations to practice OL in order to be able to meet contemporary intense competition, as this trend is to play an important role in enhancing OE. The study suggests that the Telecommunications sector in Egypt can increase OE by influencing its OL. The study provided that it is necessary to pay more attention to the dimensions of OL as a key source for organizations to enhance the competitive advantage which is of prime significance for OE.

Originality/value: The study observes that there is a critical shortage in OL and that a greater understanding of the factors that influence the OE is of great importance. Therefore, this study is to examine the relationship between OL and OE. This research dealt with OL in terms of its concept and dimensions, in addition to dealing with the role of OL in promoting OE. Accordingly, the study provided a set of recommendations including the necessity to pay more attention to OL as a key source for OE at the Telecommunications sector in Egypt.

Keywords: organizational learning, organizational excellence

1. Introduction

Organizational Learning (OL) works as a catalyst to guide the organization in a progressive way. OL leads to enhanced productivity and performance measured through financial and non-financial variables (Imran, et al., 2011).

Succinctly address OL, development, and change by pointing out that organizations are dynamic and must be able to compete in this competitive and global society by ad infinitum learning. While peak performance is the goal, there are limits to human stamina. Thus, it is imperative to understand that human stamina is limited and that employees are not machines or robots. OL depends on synergy, effective knowledge management, and creativity. One strategy for reaching peak performance is to work smarter not harder (Schwartz, et al., 2010).

OL is dynamic as it involves basic elements of organizational development and growth. Organizations can grow in the traditional sense of increased capital or revenues. From a learning perspective, however, organizations grow when there is an increase in shared understanding involving the organization, its environment and the relationship between the two (Holland & Salama, 2010).

OL includes enhanced knowledge and decision making on how to meet performance objectives, improved internal communication and exchange, engagement and cooperation, as well as motivation and commitment to the organization and organizational performance (Caemmerer & Wilson, 2010).

Organizations have used OL as a strategy for achieving long-term success. Therefore, the analysis of OL is important for both practitioners and researchers. OL has been considered, from a strategic perspective, as a source of heterogeneity among organizations, as well as a basis for a possible competitive advantage (Liao & Wu, 2009).

The scientific conception of knowledge in organizations is still in an early stage of development, although a large and growing body of literature on organizational knowledge, OL, knowledge creation and knowledge management is emerging. Most researchers consider that OL is the product of organizational members' involvement in the interaction and sharing of experiences and knowledge (Curado, 2006).

2. Literature Review

2.1. Organizational Learning OL

The term "learning" in English, according to Oxford (1960) means "to obtain the knowledge or skill by study, experience, thinking, preservation, remembering, taking science or finding out manner.

In French, according to (Robert, 1983), "Apprendre" denotes telling something, acquiring knowledge by mental work or mediated experience.

Learning does not mean education, as education is a deliberate process and needs a teacher and the recipient, while learning can be deliberate or unintentional (Moorhead & Griffin, 1995).

Learning is an effective way to achieve the goals of individuals to obtain rewards, prestige, power and/or strength. It is an effective tool to manage change (Robson, 1997).

Learning is a process of interaction between the individual and the organization through mutual influence. It is making the members of the organization learn together increasing their collective efficiency (Torrington & Hall, 1998).

The term "learn" in English denotes acquiring knowledge or skill via study, experience, thinking, memorizing or knowing (Oxford, 1960). Psychologists define this term as an acquisition of a series of responses throughout time that led to change of behavior (Buehel & Probst, 2000).

Learning is a critical variable in the organization's ability to successfully deal with the ever-changing environment, and OL is vital to decision-making at the organization as a means of access to information and knowledge besides absorbing and processing them (Nath & Mrinalini, 2002).

Most researchers have pointed to the importance of OL for the individual and the organization. Learning contributes to the development of a person by helping him recognize and understand others, interact with them and improve his skills in human relations. This improves the experience of life in order to achieve compatibility with the cultural, social and environmental requirements (Argyris & Schon, 1978).

OL can be defined as a continuous testing of experience and its transformation into knowledge available to the whole organization and relevant to their mission (Senge, 1990).

OL represents the bridge between work and creativity, playing an important role in getting the competitive advantage of the organization (Brown & Dguid, 1991).

OL is divided into four processes: information acquisition, information distribution, information interpretation and organizational memory (Huber, 1991).

Some researchers defined OL as all systems, mechanisms and processes used to improve the potentials of individuals continuously so as to achieve specific goals relating to individuals and the organization (Fargo & Skyrme, 1995).

OL is the means through which old ideas are superseded and replaced with new ones. It is listening to others and heeding their opinions (Jones, 1995).

OL is one of the important sources of sustainable competitive advantage (Fulmer et al., 1998; Malhotra, 1996).

OL has received increased attention from researchers and practitioners alike as a means to address how firms respond to rapidly changing environments (Crossan & Guatto, 1996).

OL is a mechanism by which the organization transforms the individual knowledge of employees into social knowledge (Grant, 1996; Spender, 1996).

OL emerges when organizations acquire information (knowledge, understandings, know-how, techniques and procedures) of any kind by any means (Argyris & Schön, 1978).

OL has been linked to many important organizational outcomes such as the facilitation of innovation (Ahuja & Lampert, 2001), the survival and effectiveness of acquisitions, diversifications and foreign entries (Barkema et al., 1996; Hayward, 2002), increased customer orientation (Hult et al., 2000), and the successful implementation of information systems and business process re-engineering to mention a few (Caron et al., 1994; Robey & Sahay, 1996).

The organization's ability to learn and adapt to change has become one of the basic conditions for efficiency and survival of the organization. OL and the acquisition and dissemination of knowledge play an important role in improving products and services (Licker, 1997; Allee, 1997).

OL is an activity and process via which the organization may attain learning (Finger & Brand, 1999).

OL may take place due to the continuous interaction among individuals through learning. This helps them acquire experiences (Hodgkinson, 2000).

OL is considered to be one of the most promising concepts in modern organizational and leadership literature. OL has grown dramatically, generating a great deal of debate and research (Bapuji & Crossan, 2004).

OL system includes vision, strategy, culture, leadership, structure, systems and processes (Stratigos, 2001).

OL is the means for continuous improvement of efficiency and quality, creativity and responsiveness to customers (Hill & Jones, 2001).

OL may reflect the process of learning in an organization among all employees and on all levels. It is the product of organizational members' involvement in the interaction and sharing of experiences and knowledge. Thus, it is imperative for organizations to promote a "bottom-up" philosophy where suggestions for change start at the bottom of the organization and work their way up to the top. This shared form of knowledge implies that individual learning is a necessity, but not a sufficient condition for OL to occur. The information distributed through the organization's members is shared and interpreted in a systematic way. OL is one of the tools that may be used to accomplish the competitive edge of the organization (Ghosh, 2004).

OL is a process that leads to an organization's incessant learning (Thomas & Allen, 2006).

OL has become an important concept for organizational survival in this competitive environment. The notion of organizational learning has been over-emphasized in the literature, because of the complexity involved in the collective learning processes; it has been perceived as spiritual in nature (Yeo, 2007).

OL is the need for information and knowledge sharing among employees. The failure of employees to speak to their bosses concerning potential problems at work is a frequent impediment to OL. This type of silence, he contends, keeps organizations from recognizing, correcting, and learning from their mistakes (Detert & Burris, 2007).

A primary difference between individual and OL seems to reside not only in the process of learning per se, but also in the method by which knowledge is stored and communicated to other organizational members. Generally speaking, if individual-level knowledge is going to have wide organizational impact, and OL is to occur, knowledge must be either transferred or shared (King et al., 2008).

OL has been regarded as one of the strategic means of achieving long-term organizational success. Reviews of the OL literature have noted a tremendous increase in research interest over the last two decades (Bapuji & Crossan, 2004). OL has become an increasingly important area recently (Liao & Wu, 2009).

OL represents a complex interrelationship among people, their actions, symbols, and processes within the organization. It aims to generate, disseminate, and apply knowledge in an organization. It consists of five learning cycles (1) individual, (2) individual/group, (3) group, (4) group/organizational, (5) organizational (Kok, 2010).

2.2. Organizational Excellence

Organizational Excellence (OE) is the pursuit of the organization towards the exploitation of appropriate opportunities through effective strategic planning and shared vision based on clarity of purpose and adequacy of resources to achieve high levels of performance (Burkhat, 1993).

Excellence is any act or activity for anyone who wants to enhance and achieve the goals of the organization. OE depends mainly on the competitive strategy of the organization, technology and relationship with customers (Mcgregor, 1994).

The excellent organization is constantly superior to the best international practices in the performance of its functions. It is also linked with its customers and clients with relations of support and interaction. It recognizes the capabilities of its competitors; their strengths and weaknesses, as well as the opportunities and threats that surround it (Gilgeous, 1997).

OE is the total of the work and the way to achieve the objectives of all parties concerned with the organization. Thus comes the possibility of long-term success (Eskild, 1999).

The organization is distinguished by consistently excelling in the performance of its functions, and having good relations with its customers and clients. It should identify the performance of its competitors, strengths and weaknesses, and the circumstances surrounding its environment (Gilgeous & Gilgeous, 1999).

OE is a total way of action that leads to the satisfaction of both balance (1) of employees in the organization, (2) customers, (3) the surrounding community, and thus increasing the possibility of success of the organization in the long run (Eskild, 1999).

There are several determinants to achieve OE; such as the presence of visionary leadership, focusing on the future through strategic planning, activating the role of knowledge and adoption of organizational learning (Grant, 2000).

The aim of the organizational process excellence is to develop a strong work force having the ability to produce goods and services in a manner that achieves the internal and external consumer expectations. The intrinsic value is to achieve internal and external consumer desires, and to develop awareness towards achieving the objectives of the organization, through (1) energies of creativity and innovation (2) policies and flexible measures (3) skilled leadership to guide and stimulate communication with employees (4) manpower and professionals having a capacity for creativity and innovation (5) a cultural climate that provides confidence, safety, job satisfaction and real belonging and loyalty to the organization to achieve customer satisfaction (Rahman, 2001).

OE is the organization's ability to create and exploit the opportunities of encouraging climate, in addition to effective confrontation of different problems at work. In other words, OE is the ability of organizations to provide development opportunities, and create the conditions that stimulate and correct performance problems, besides facing them effectively. In other words, there are several determinants to achieve OE, (1) the existence of a vision in the organization's leadership, (2) focusing on the future, (3) activating the role of knowledge, organizational learning and individual learning (Grote, 2002).

Performance is high in organizations that contain centers of excellence rather than those organizations that do not include centers of excellence (Frost et al., 2002).

There are a number of steps that must be followed in order to build a distinct organization. They are (1) communicating the vision of leadership with regard to the excellence to all workers in the various levels of management in a clear and specific manner, (2) linking OE and all operations and activities of the organization, (3) understanding the basic capabilities of the organization and evaluation in terms of how optimally such capabilities are exploited in order to achieve excellence, (4) empowering workers and encouraging initiatives, (5) employing a technical image that achieves the highest possible use, (6) dissemination of knowledge among all employees within the organization, and (7) encouraging learning at individual level, group level, and organizational level (Sasmita & Nayantara, 2003).

The shift from traditional management to integration results from the perception of employees that they participate strongly in solving problems, and that the merger turns into excellence. The goal is to get the most productivity, better quality, consumer satisfaction, and excellence to maximize and enhance the overall performance of the organization. This can bring success and gives the authority to make decisions in various business achievements of the Organization. (Kathryn et al., 2005).

Excellence can be attained by encouraging workers to participate with their opinions and suggestions in solving the problems they face within the organization, the delegation of authority, freedom and avoidance of excessive instructions, policies and commands control related to their work, freedom to take responsibility to express their views and make their own decisions besides doing their jobs (Simard & Rice, 2006).

The excellent organization is able to collect, manage and use information from the organization in order to ensure the achievement of the desired goals (Martensen, et al., 2007).

The outstanding management must have a vision that can create a climate of participation and provide assistance to excellence conditions (Vouzias & Psychogios, 2007). This also requires a clear strategy, an organizational structure that promotes a sense of responsibility, skills development, keeping channels of communication open, guidance and training of staff as the employees are the key element in the process of excellence. Employees' awareness of excellence enhances the meaning of fidelity, devotion to the attention of customers and their satisfaction (Al-Marri et al., 2007).

The excellent organization is crystallized through the ability to study the current situation of the organization, external variables through strategic analysis processes, specify its foundations and strategic direction, formulate the organization's mission, vision, strategic objectives and lay the foundations and criteria for measuring results. It prepares strategic plans in light of its objectives in order to exploit

opportunities and avoid threats. It develops follow-up and identifies the environmental variables and their possible impact on the organization's mechanisms (Bukovec & Markic, 2008).

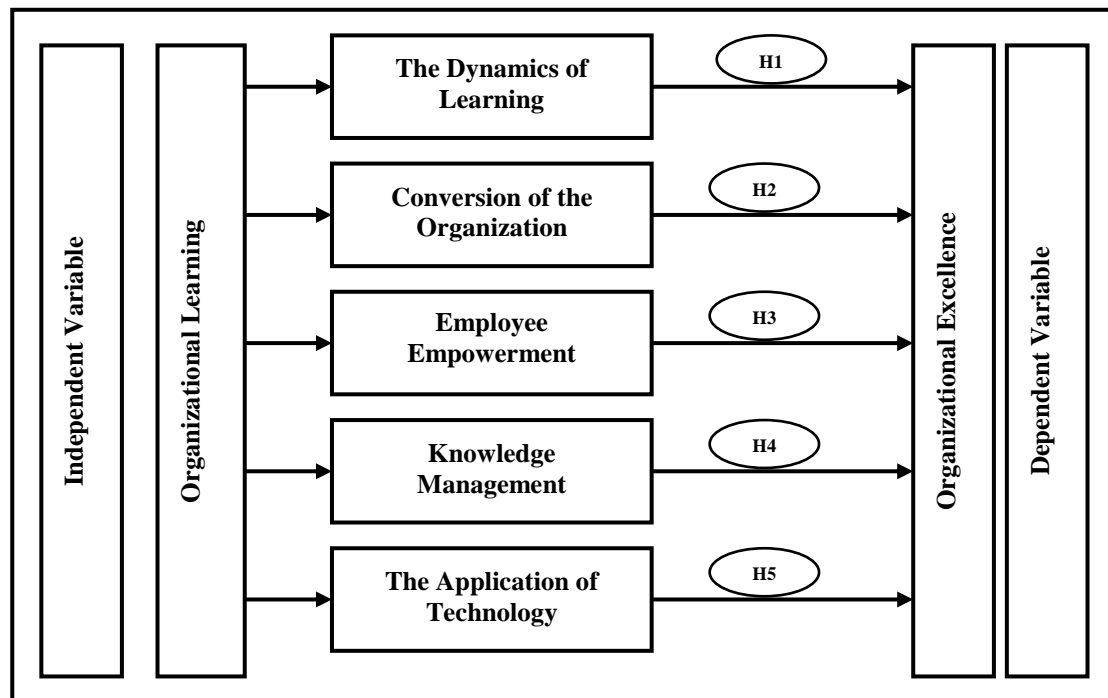
Through reviewing previous concepts, OE may be defined as organization's ability to contribute strategically to achieve its goals effectively and in a form which distinguishes it from the rest of the organizations working in the same field.

3. Methodology

3.1. Research Model

The proposed comprehensive conceptual model is presented in Figure (1). The diagram below shows that there is one independent variable of OL. There is one dependent variable of OE. It shows the rational links among the variables. The research model is as shown in the following figure.

Figure (1)
Proposed Comprehensive Conceptual Model



The research framework suggests that OL has an impact on OE. OL is measured in terms of the dynamics of learning, conversion of the organization, employee empowerment, knowledge management, and the application of technology (American Society for Training and Development, 2002).

OE is measured in terms of leaders excellence, subordinates excellence, operational excellence, culture excellence, and financial excellence (Kandula, 2002; Hesseblin & Gohanston, 2002).

3.2. Research Questions and Hypotheses

The researcher found the research problem through two sources. The first source is to be found in previous studies, and it turns out that there is a lack in the number of literature reviews that dealt with the analysis of the relationship between OL and OE at the Telecommunications sector in Egypt. This called for the researcher to test this relationship in the Egyptian environment. The second source is the pilot study, which was conducted in an interview with (30) employees in order to identify the relationship between OL and OE. The researcher found through the pilot study several indicators; notably the important and vital role that could be played by OL in reinforcing OE at the Telecommunications sector in Egypt. As a result of the discussions given above, the research questions are as follows:

Q1: What is the nature and extent of the relationship between OL (the dynamics of learning) and OE at the Telecommunications sector in Egypt?

Q2: What is the nature of the relationship between OL (conversion of the organization) and OE at the Telecommunications sector in Egypt?

Q3: What is the extent of the relationship between OL (employee empowerment) and OE at the Telecommunications sector in Egypt?

Q4: What is the relationship between OL (knowledge management) and OE at the Telecommunications sector in Egypt?.

Q5: What is the nature and extent of the relationship between OL (the application of technology) and OE at the Telecommunications sector in Egypt?

There are studies in literature that study OL and OE factors separately and within the frame of bilateral relation but there is no study that examines these two factors collectively that are oriented at the Egyptian environment. This study aims to contribute to the literature by examining the research variables collectively and reveal the interaction between the research variables.

As a result of the discussions given above, the following hypotheses were developed to test the effect of OL on OE at the Telecommunications sector in Egypt. The following hypotheses were developed to test if there is a significant correlation between OL and OE.

H1: There is no statistically significant relationship between OL (the dynamics of learning) and OE at the Telecommunications sector in Egypt.

H2: OL (conversion of the organization) of employees has no statistically significant effect on OE at the Telecommunications sector in Egypt.

H3: There is no statistically significant relationship between OL (employee empowerment) and OE at the Telecommunications sector in Egypt.

H4: OL (knowledge management) of employees has no statistically significant impact on OE at the Telecommunications sector in Egypt.

H5: There is no statistically significant relationship between OL (the application of technology) and OE at the Telecommunications sector in Egypt.

3.3. Population and Sample

The population of the study included all employees at the Telecommunications sector in Egypt. The total population is 1196 employees. Determination of respondent sample size was calculated using the formula (Daniel, 1999) as follows:

$$n = \frac{N \times (Z)^2 \times P(1-P)}{d^2 (N-1) + (Z)^2 \times P(1-P)}$$

The number of samples obtained by 290 employees at the Telecommunications sector in Egypt is as presented in Table (1).

Table (1) Distribution of the Sample Size

Telecommunication Sector in Egypt	Nurses	Percentage	Sample Size
1. Telecom Egypt	812	68%	290X 68% = 197
2. Vodafone	134	11%	290X 11% = 32
3. Mobinil	128	11%	290X 11% = 32
4. Télécommunications	122	10%	290X 10% = 29
Total	1196	100%	290X 100% = 290

Source: Personnel Department at the Telecommunications Sector in Egypt, 2015

Table (2) provides the features of the respondents at the Telecommunications sector in Egypt who participated in the survey.

Table (2) Demographic Variables Frequency Distributions

Demographic Variables	Category	Frequency	Percentage
1- Sex	Male	180	69.2%
	Female	80	30.8%
	Total	260	100%
2- Marital Status	Single	120	46.2%
	Married	140	53.8%
	Total	260	100%
3-Age	From 30 to 45	110	42.3%
	Above 45	150	57.7%
	Total	260	100%
4- Educational Level	University	100	38.5%
	Post Graduate	160	61.5%
	Total	260	100%
5- Period of Experience	From 5 to 10	60	23.1%
	More than 10	200	76.9%
	Total	260	100%

3.4. Procedure

The goal of this study was to identify the relationship between OL and OE at the Telecommunications sector in Egypt. A survey research method was used to collect data. The questionnaire included three questions, relating to OL, OE, and biographical information of employees at the Telecommunications sector in Egypt.

Data collection took two months. Survey responses were 89%, 260 completed surveys out of the 290 distributed.

3.5. Research Variables and Methods of Measuring

3.5.1. Organizational Learning Scale

The researcher will depend on the scale developed by American Society for Training and Development (2002) in measuring OL, which has been divided into five main components (the dynamics of learning, conversion of the organization, employee empowerment, knowledge management, and the application of technology). The 25-item scale OL section is based on American Society for Training and Development (2002). There were five items measuring the dynamics of learning, five items measuring conversion of the organization, five items measuring employee empowerment, six items measuring knowledge management, and four items measuring the application of technology.

3.5.2. Organizational Excellence Scale

The researcher will depend on the scale developed by Kandula, 2002; Hesseblin & Gohanston, 2002 in measuring OE, which has been divided into six main components (leaders excellence, subordinates excellence, operational excellence, culture excellence, and financial excellence). OE consists of 28 statements. There were six items measuring leaders excellence, seven items measuring subordinates excellence, five items measuring operational excellence, five items measuring culture excellence, and five items measuring financial excellence.

Responses to all items scales were anchored on a five (5) point Likert scale for each statement, ranging from (5) “full agreement,” (4) for “agree,” (3) for “neutral,” (2) for “disagree,” and (1) for “full disagreement.”

3.6. Data Analysis and Testing Hypotheses

The researcher has employed the following methods: (1) Cronbach's alpha or ACC, (2) (MRA), and (3) F- test and T-test. All these tests are found in SPSS.

4. Hypotheses Testing

4.1. Evaluating Reliability

Before testing the hypotheses and research questions, the reliability of OL and OE were assessed to reduce errors of measuring and maximizing constancy of these scales. To assess the reliability of the data, Cronbach's alpha test was conducted.

Table (3) shows the reliability results for OL and OE. All items had alphas above 0.70 and were, therefore, excellent, according to Langdrige's (2004) criteria.

Table (3) Reliability of OL and OE

Variables	The Dimension	Number of Statement	ACC
OL	The Dynamics of Learning	5	0.7680
	Conversion of the Organization	5	0.7922
	Employee Empowerment	5	0.6421
	Knowledge Management	6	0.7464
	The Application of Technology	4	0.6874
	Total Measurement	25	0.9279
OE	Leaders Excellence	6	0.9066
	Subordinates Excellence	7	0.9691
	Operational Excellence	5	0.9220
	Culture Excellence	5	0.8741
	Financial Excellence	5	0.9220
	Total Measurement	28	0.9859

Regarding Table (3), the 25 items of OL are reliable because the ACC is 0.9279. The dynamics of learning, which consists of 5 items, is reliable because the ACC is 0.7680. Conversion of the organization, which consists of 5 items, is reliable because the ACC is 0.7922. Furthermore, employee empowerment which consists of 5 items, is reliable because the ACC is 0.6421. Knowledge management, which consists of 6 items, is reliable because the ACC is 0.7464. The application of technology, which consists of 4 items, is reliable because the ACC is 0.6874. Thus, the internal consistency of OE can be acceptable.

According to Table (3), the 28 items of OE are reliable because the ACC is 0.9859. The six items of leaders excellence scales are reliable due to the fact that the ACC is 0.9066. The subordinates excellence, which consists of seven items, is reliable since the ACC is 0.9691. The five items related to operational excellence are reliable as ACC is 0.9220. Furthermore, the five items of culture excellence scales are reliable due to the fact that the ACC is 0.8741. The financial excellence, which consists of five items, is reliable since the ACC is 0.9220. Thus, the reliability of OE can be acceptable.

Accordingly, two scales were defined, OL (25 variables), where ACC represented about 0.9279, and OE (28 variables), where ACC represented 0.9859.

4.2. Correlation Analysis

The researcher calculated means and standard deviations for each variable and created a correlation matrix of all variables used in hypothesis testing. Arithmetic mean and standard deviation values related to dependent and independent variables of this study and correlation coefficients between these variables are given in Table (5).

Table (4) Descriptive Statistics and Correlation Matrix of Constructs

Variables	Mean	Std. Deviation	1	2	3	4	5	6
1. The Dynamics of Learning	3.82	0.742	1					
2. Conversion of the Organization	3.80	0.745	0.984**	1				
3. Employee Empowerment	3.66	0.740	0.643**	0.624**	1			
4. Knowledge Management	3.78	0.711	0.670**	0.661**	0.909**	1		
5. The Application of Technology	3.91	0.770	0.604**	0.599**	0.704**	0.590**	1	
6. Organizational Excellence	3.55	0.888	0.552**	0.522**	0.466**	0.408**	0.611**	1

Note: ** Correlation is significant at 0.01 level.

According to Table (4), the first issue examined was the different facets of OL. Among the various facets of OL, those who responded identified the presence of the application of technology (M=3.91, SD=0.770). This was followed by the dynamics of learning (M=3.82, SD=0.742), conversion of the organization (M=3.80, SD=0.745), knowledge management (M=3.78, SD=0.711), and employee empowerment (M=3.66, SD=0.740).

The second issue examined was the different facets of OE (the moral conditions of the work environment, job characteristics, wages and rewards, team work, head's method in supervision, and participation in decision-making). Most respondents identified the overall OE (M=3.55, SD=0.888).

According to Table (4), OL dimensions have positive and significant relation with OE dimensions. The correlation between OL (the dynamics of learning) and OE is 0.552. For OL (conversion of the organization) and OE, the value is 0.522 whereas OL (employee empowerment) and OE show correlation value of 0.466. For OL (knowledge management) and OE, the value is 0.408 whereas OL (the application of technology) and OE show correlation value of 0.611.

Finally, Table (4) proves that there is a significant and positive correlation between OL and OE. So our hypothesis is supported and it can be said that there is a significant and positive correlation between OL and OE.

4.3. The Relationship between OL (The Dynamics of Learning) and OE

The relationship between OL (The Dynamics of Learning) at the Telecommunications sector in Egypt is determined. The first hypothesis to be tested is:

There is no relationship between OL (The Dynamics of Learning) and OE at the Telecommunications sector in Egypt.

Table (5) MRA Results for OL (The Dynamics of Learning) and OE

The Variables of OL (The Dynamics of Learning)	Beta	R	R ²
1. Making senior management encourage workers to learn.	0.120*	0.274	0.075
2. Training individuals on the skill of listening and effective communication.	0.102	0.442	0.178
3. Raising individuals' interest in how to learn from others.	0.249**	0.417	0.173
4. Individuals' recognizing the differences between them in the performance of their business.	0.476**	0.600	0.360
5. Individuals' performing the work assigned to them successfully.	0.142*	0.294	0.086
<ul style="list-style-type: none"> ▪ Multiple Correlation Coefficients ▪ Coefficient of Determination ▪ The Value of Calculated F ▪ Degree of Freedom ▪ The Value of Indexed F ▪ Level of Significant 		0.652	0.425
		37.584	5, 254
		3.57	0.05
** P < 0.01 * P < 0.05			

Table (5) proves that there is a relationship between OL (The Dynamics of Learning) and OE at significance level of 0,000. As a result of the value of R^2 , the 5 independent variables of the dynamics of learning can explain 42.5% of the total differentiation in OE level.

For the results of a structural analysis of the MRA, the direct effect of OL (The Dynamics of Learning) and OE is obtained. Because MCC is 0.652, it is concluded that there is enough empirical evidence to reject the null hypothesis.

4.4. The Relationship between OL (Conversion of the Organization) and OE

The relationship between OL (Conversion of the Organization) and OE at the Telecommunications sector in Egypt is determined. The second hypothesis to be tested is:

There is no relationship between OL (Conversion of the Organization) and OE at the Telecommunications sector in Egypt.

As Table (6) proves, the MRA resulted in the R of 0.643. This means that OE has been significantly explained by the 5 independent variables of OL (Conversion of the Organization).

Furthermore, the R^2 of 0.413 indicates that the percentage of the variable interprets the whole model, that is, 41.3%. It is evident that the five independent variables justified 41.3% of the total factors of OE. Hence, 58.7% are explained by the other factors. Therefore, there is enough empirical evidence to reject the null hypothesis.

Table (6)The Relationship between OL (Conversion of the Organization) and OE

The Variables of OL (Conversion of the Organization)	Beta	R	R ²
1. Senior management supports the vision of the learning organization.	0.446 **	0.586	0.343, 254
2. Organizational climate supports the importance of learning from others.	0.203*	0.416	0.173
3. Individuals can learn from failure and from success.	0.123	0.447	0.199
4. Processes and programs are important opportunities for learning.	0.139*	0.296	0.087
5. Availability of administrative levels to achieve effective communication and learning.	0.164**	0.323	0.104
<ul style="list-style-type: none"> ▪ Multiple Correlation Coefficients ▪ Coefficient of Determination ▪ The Value of Calculated F ▪ Degree of Freedom ▪ The Value of Indexed F ▪ Level of Significant 		0.643 0.413 35.720 5 3.57 0.05	
** P < 0.01 * P < 0.05			

4.5. The Relationship between OL (Employee Empowerment) and OE

The relationship between OL (Employee Empowerment) and OE at the Telecommunications sector in Egypt is determined. The third hypothesis to be tested is:

There is no relationship between OL (Employee Empowerment) and OE at the Telecommunications sector in Egypt.

Table (7) The Relationship between OL (Employee Empowerment) and OE

The Variables of OL (Employee Empowerment)	Beta	R	R ²
1. Enabling individuals to develop and learn from others.	0.457**	0.444	0.197
2. Decentralization and delegation of authority.	0.100	0.285	0.081
3. The need for managers to train and instruct personnel.	0.067	0.259	0.067
4. The organization's interest in the management of customer feedback.	0.072	0.237	0.056
5. Universities and associations should be involved in the learning process.	0.163*	0.259	0.067
<ul style="list-style-type: none"> ▪ Multiple Correlation Coefficients ▪ Coefficient of Determination ▪ The Value of Calculated F ▪ Degree of Freedom ▪ The Value of Indexed F ▪ Level of Significant 		0.523 0.274 19.166 5, 254 3.57 0.05	
** P < 0.01 * P < 0.05			

Table (7) proves that there is a relationship between OL (Employee Empowerment) OE. As a result of the value of R², the 5 independent variables of knowledge organization can explain 27.4% of the total differentiation in OE level.

For the results of a structural analysis of the MRA, the direct effect of OL (Employee Empowerment) and OE is obtained. Because MCC is 0.523, there is enough empirical evidence to reject the null hypothesis.

4.6. The Relationship between OL (Knowledge Management) and OE

The relationship between OL (Knowledge Management) and OE at the Telecommunications sector in Egypt is determined. The fourth hypothesis to be tested is:

There is no relationship between OL (Knowledge Management) and OE at the Telecommunications sector in Egypt.

Table (8) The Relationship between OL (Knowledge Management) and OE

The Variables of OL (Knowledge Management)	Beta	R	R ²
1. Observing what others are doing outside the organization.	0.249**	0.322	0.103
2. Workers control of how to achieve best practices.	0.199**	0.243	0.059
3. Achieving creative thinking skills among workers.	1.514**	0.286	0.081
4. The need for an exhibition to test new ways of working.	0.115	0.298	0.088
5. Having a system for the creation and use of knowledge.	1.366**	0.259	0.067
6. Developing learning strategies.	0.008**	0.259	0.067
<ul style="list-style-type: none"> ▪ Multiple Correlation Coefficients ▪ Coefficient of Determination ▪ The Value of Calculated F ▪ Degree of Freedom ▪ The Value of Indexed F ▪ Level of Significant 		0.490 0.240 13.338 6, 253 3.57 0.05	
** P < 0.01 * P < 0.05			

Table (8) proves that there is a relationship between OL (Knowledge Management) and OE at significance level of 0,000. As a result of the value of R², the 5 independent variables of knowledge distribution can explain 24% of the total differentiation in OE level. For the results of a structural analysis of the MRA, the direct effect of OL (Knowledge Management) and OE is obtained. Because MCC is 0.49, it is concluded that there is enough empirical evidence to reject the null hypothesis.

4.7. The Relationship between OL (The Application of Technology) and OE

The relationship between OL (The Application of Technology) and OE at the Telecommunications sector in Egypt is determined. The fifth hypothesis to be tested is:

There is no relationship between OL (The Application of Technology) and OE at the Telecommunications sector in Egypt.

Table (9) The Relationship between OL (The Application of Technology) and OE

The Variables of OL (The Application of Technology)	Beta	R	R ²
1. Availability of an information system that works effectively.	0.133*	0.429	0.184
2. Getting information in a timely manner.	0.502**	0.630	0.396
3. Relying on JIT system.	0.164**	0.416	0.173
4. Availability of electronic systems to support the learning process.	0.023	0.302	0.091
▪ Multiple Correlation Coefficients		0.670	
▪ Coefficient of Determination		0.448	
▪ The Value of Calculated F		51.800	
▪ Degree of Freedom		4, 255	
▪ The Value of Indexed F		3.57	
▪ Level of Significant		0.05	
** P < 0.01 * P < 0.05			

As Table (9) proves, the MRA resulted in the R of 0.670. This means that OE has been significantly explained by the 5 independent variables of the application of technology.

Furthermore, the R² of 0.448 indicates that the percentage of the variable interprets the whole model, that is, 44.8%. It is evident that the five independent variables of the application of technology justified 44.8% of the total factors of OE. Hence, 55.2% are explained by the other factors. Therefore, there is enough empirical evidence to reject the null hypothesis.

5. Research Findings

The present study on analyzing the role of OL to improve the OE at the Telecommunications sector in Egypt reveals a set of results that deserve study and attention. The most important of these results are summarized as follows:

1. There is a significant relationship between OL and OE at the Telecommunications sector in Egypt. OL plays an important role in influencing OE. Also, OL contributes significantly to reinforcing OE.
2. This study concluded that the OL was positively related with OE at the Telecommunications sector in Egypt. Overall findings from this study suggested that OL does affect OE.
3. There is a significant relationship between OL and OE at the Telecommunications sector in Egypt. In other words, knowledge creation, which is an integral part of OL, significantly and positively influences OE.
4. This study concluded that the OL was positively related with OE at the Telecommunications sector in Egypt. In other words, OL (knowledge acquisition) was positively related with OE.
5. There is a positive relationship between the types of OL and OE of employees at the Telecommunications sector in Egypt. In other words, knowledge organization, which is an integral part of OL, positively correlated with OE.
6. There is a significant relationship between OL and OE at the Telecommunications sector in Egypt. In other words, knowledge distribution, which is an integral part of OL, significantly and positively influences OE.
7. This study concluded that the OL was positively related with OE at the Telecommunications sector in Egypt. In other words, OL (use of knowledge) was positively related with OE.
8. There is a positive relationship between the types of OL (knowledge creation, knowledge acquisition, knowledge organization, knowledge distribution, and use of knowledge) and OE at the Telecommunications sector in Egypt. In other words, OL affects OE.

6. Research Recommendations

In the light of previous results, the researcher completed a set of recommendations, and can summarize the most important recommendations as follows:

1. Officials at the Telecommunications sector in Egypt should deepen the concept of OL and its importance to all employees, as well as access to best practices in OL and application through specialized training programs that aim to develop the capacity of workers and develop their skills and knowledge.

2. Knowledge will lead to higher levels of customer satisfaction through the establishment of organizations in Egypt to provide services of better quality. This leads to increased revenues.
3. Designing and implementing a range of training programs for all officials at the Telecommunications sector in Egypt for the development and improvement of OL in terms of knowledge creation, acquisition, organization, distribution and use. This can be done through the development of awareness among officials at the Telecommunications sector in Egypt of the concept and importance of the dimensions of OL and their positive impact both on the employees level, or organization, to build OL to achieve a number of important benefits including the development and growth of commercial banks, improving the communication process the ability to make decisions, achieving competitive advantage, improving financial performance, increasing the value of commercial banks from a market perspective, and improving OE. That means that OL plays an important role in improving the OE to achieve customer satisfaction with the service provided by commercial banks in Egypt.
4. Allocation of a separate unit dedicated to developing OL activities and working on the follow-up and development of OL at the Telecommunications sector in Egypt.
5. Developing the skills and capabilities of officials at the Telecommunications sector in Egypt in the field of OL, through specialized training programs that focus on OL as one of the methods that can be used to improve OE on the one hand, and to achieve competitive advantage on the other hand.
6. Increasing the interest of officials at the Telecommunications sector in Egypt to possess self-knowledge of their employees, through paying attention to selection of new employees who possess knowledge of medical excellence, in addition to providing employees with current medical knowledge in their respective fields, as this reflects the positive impact on the performance of commercial banks in Egypt.
7. Increasing the interest of officials at the Telecommunications sector in Egypt, both types of knowledge implicit and explicit, through the activation of knowledge generation processes, inventory and configuration of ideas, experience and skills available to the employees and saving knowledge bases in order to facilitate reference.
8. Seeking for ways and means to achieve the objectives of the organization so as to ensure survival and continuance, and perhaps Management Excellence is the perfect choice to make it happen.
9. Creating a culture of excellence among workers, and drawing their attention to customer service. Given that excellence is based primarily on this aspect, it can not be achieved only by creating a positive difference from competitors.
10. Translating the organization's vision into a set of objectives, policies and activities in order to achieve OE, through activating the channels of communication within the organization so that there is clarity and a common understanding of the organization's vision among all employees.
11. Strengthening the core capabilities of the organization, which include knowledge and skills, to achieve OE and create value at the client. This is through the employment of the strengths of the organization to gain a competitive advantage, in addition to prioritizing activities that add value to the services provided by the organization to clients.
12. There is an urgent need that the organization reconsider its perceptions and understanding of the role of the client. This is because excellence does significantly depend on the customer. Therefore, he must be treated well, besides, meeting his needs and expectations.

7. Prospective Proposed Research

The present study is one of the pioneer works on the subject in Egypt' organizational context. It provides evidence, suggesting the importance and contributes to the existing body of universal knowledge in areas of OL.

The findings of the research help OL researchers as well as practitioners develop a better understanding of the role of OE and successful implementation of OL.

The current study may provide necessary guidelines to understand the issues of OL and OE. Also, the findings of this study provide an initial understanding of the way towards further research in this area. Future research may focus on other important areas of OL and OE.

Further prospective studies on OL and its impact on some variables such as job performance, innovation organizational, strategic performance, and effectiveness of managers in different organizations,

can be applied to other communities such as private universities, school districts, as well as public and private banks.

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